Remarks

Claims 1-10 are pending in the instant application, claim 1 is an independent claim. Claims 1, 4, 9 and 10 are amended herein. No new matter is added by these amendments. Specific rejections and objections to the claims are addressed below.

***Rejections Under §112, 2nd Paragraph.***

Claim 4 has been amended for clarification to remove the phrase "or some combination thereof", as indicated by the examiner. Accordingly, Applicant requests removal of the rejection.

Claim 9 and 10 have been amended to clarify the structure of these claims, with respect to the figures. Notably, the phrase "handheld mechanical stripper configured to strip a fiber" has been replaced with "handheld stripper configured to strip a fiber with a burst of hot fluid". Support for this amendment can be found, for example, in FIG. 8 and accompanying text. Claim 10 depends from claim 9 and has been amended to be consistent with claim 9. Accordingly, Applicant requests removal of the rejection.

As a result of these claim amendments, no amendment to the drawings is required.

***Rejections Under §102. – '767 Patent***

Claims 1 and 3 were rejected under §102 as being clearly anticipated by US Pat. No. 4,726,767 to Nakajima ("the '767 patent"), as disclosing "all of the claimed subject matter" of these claims. Applicant traverses the rejections, asserting that claims 1 and 3 are patentably distinct over the cited references for the reasons stated below.

The '767 patent discloses a "hot blow generating device" that discharges "hot blow" out a discharge port 2a. However, the device of the '767 patent is structurally and functionally quite different from the invention of claim 1, as an example. For example, the '767 patent includes a rotary blower 27, motor 28, driven by batteries 29, the blower 27 being used to force air through the device via two paths: (1) through the main body 1 and out the discharge port 2a and (2) into nozzle 17 by way of suction port 18 to create an air/gas mixture through fire nozzle port 16 (with gas from the reservoir 3). (col. 5 line 1 - col. 2 line 27). The fire nozzle 16 provides a path for the air/ gas mix into the combustion catalyst 19 (which is within the main body 1), where there is "complete combustion". (col. 5 lines 1-18) Combustion is sparked by a spark plug disposed

between the output of fire nozzle 16 and the combustion catalyst 19. A heat exchanger 9a (i.e., a spiral pipeway) is disposed at the discharge port 2a. The "heat exchanger 9a is heated by the combustion exhaust gas to completely evaporize the liquefied gas 5." The evaporized gas is then fed into the combustion elements via a final gas joint 10. (col. 4, lines 39-54)

In operation, "the air/fuel mixture is put to a flaming combustion at the face of the fire nozzle port 16. The combustion catalyst 15 is heated to its reaction temperature ... by the heat of the pilot flame. The temperature of the nozzle 17 also rises by the heat from the from the fire nozzle port 16 within a period of 5-10 sec after ignition..." which then starts the motor 28 which, in turn, drives the blower 27 to supply external air. The "heat exchanger 9a is heated by the combustion exhaust gas to completely evaporize the liquefied gas 5." "The combustion exhaust from the combustion catalyst 19 is mixed with a portion of the air stream supplied from the blower 27 and passed through the outer combustion of the combustion catalyst 19 in the inside downstream end of the combustion casing 2 and the hot blow thus increased the flow for the flow rate and cooled to a desired temperature as a result of mixing is exhausted from the hot blow discharge port 2a. (col. 6, line 50-col. 7 line 37)

As is clear, the '767 patent does not disclose a gas path coupled between a gas chamber (via gas valve) and an output nozzle, where combustion happens at the output nozzle – as in claim 1. Also, the system of claim 1, does not require a motor and blower (and battery) assembly for internally introducing air needed for combustion. Rather, the '767 discloses a relatively complex system including motor, blower, batteries, heat exchanger, combustion catalyst, and so on disposed between its fuel reservoir 3 and discharge port 2a. All of these add to the size, weight, complexity, and cost of such a handheld device. The present invention is distinguished, at least in part, by structural and functional simplicity when compared to the relatively complex system of the '767 patent. Further, the '767 does not disclose a filter beyond the output port to filter the exhaust from the device.

And, of course, there is no suggestion in the '767 patent to use the device for stripping the casing off of fibers. Actually, the '767 patent teaches the opposite, i.e., using the device for adding and shrinking casings onto wires and cable (e.g., see Background).

Accordingly, the Applicant believes that claim 1, and its dependent claim 3, are not anticipated by the '767 patent and respectfully requests removal of these rejections and allowance of these claims.

***Rejections Under §102. – '579 Patent***

Claims 1-4 were rejected under §102 as being clearly anticipated by US Pat. No. 5,810,579 to Lin ("the '579 patent"), as disclosing "all of the claimed subject matter" of these claims. Applicant traverses the rejections, asserting that claims 1-4 are patentably distinct over the cited references for the reasons stated below.

The '579 patent discloses adding a hot gas tube 30 that includes a honeycomb-shaped ceramic block 36 to the flame output spray tube 15 of a hot gas spray pistol. The ceramic block 36 outputs hot air via a front orifice 35. "[F]lame thus generated will heat the ceramic block 36 at the front end of the spray tube 15 directly. The hot air is blown by the force ejecting the flame via the front orifice 35 to treat a workpiece." (col. 2, lines 3-32)

However, as disclosed, the '579 patent does not anticipate claim 1, for example. The general purpose of the hot gas spray pistol of the '579 patent is to "treat a workpiece". This is obviously a very general statement, so general in fact that it does not suggest the very specialized purpose of stripping an optical fiber. Optical fibers are, by their nature, extremely fragile and sensitive to everything from cracks to residue. The simplest flaw could undesirably compromise the fiber, potentially rendering it useless, if not significantly degraded. For example, using the device of the '579 patent to strip a fiber, if not done at a sufficiently high temperature, with a sufficient flow to remove the coating with a sufficient heated burst, could lead to a fiber left with residue. There are, to Applicant's knowledge, no such handheld devices for stripping optical fiber with a burst of heat, so application of the device to this field could not be anticipated. Nor is it likely that the device of the '579 patent, without significant experimentation, could be used for stripping an optical fiber without either burning the fiber or leaving undesirable residue on the fiber.

The Applicant has amended claim 1 as a matter of clarification to clearly distinguish the burst of heated gas used in the present invention. Accordingly, the Applicant believes that claim 1, and its dependent claims 2-4, are not anticipated by the '579 patent and respectfully requests removal of these rejections and allowance of these claims.

***Rejections Under §102. – '471 Patent***

Claim 9 was rejected under §102 as being clearly anticipated by US Pat. No. 5,732,471 to Korinek, et al. ("the '471 patent"). Applicant traverses the rejections, asserting that claim 9 is patentably distinct over the cited references for the reasons stated below. Applicant has amended claim 9 to clarify that the stripper uses a burst of heated gas. Accordingly, Applicant believes that this claim is not anticipated by the reference and respectfully requests removal of this rejection and allowance of this claim.

***Rejections Under 35 USC. §103***

Claim 5 has been rejected under §103(a) as being unpatentable over the '767 patent (Nakajima) or the '579 patent (Lin) in view of US Patent No. 5,135,389 to Dai et al. ("the '389 patent"). The '389 patent discloses a gas torch for producing a very hot flame for welding, or a catalyst can be added to producing heat for melting a stick of glue or drying. (see Abstract) The catalyst 300 includes caps 310 and 320, each of which is comprised of a "wire gauze filter". (col. 3 lines 55-65)

However, unlike the present invention, the '389 patent discloses a torch that has a flow of heat, nut a burst, as required by claim 5 (via its independent claim 1). A flow of extremely hot air would ruin an optical fiber, while a burst removes the coating without continuing on to significantly heat the fiber itself. Therefore, it would not be obvious to apply the device of the '389 patent to the invention of claim 5. The '579 patent and '767 patent have each been discussed above, and for those reasons, even if combined with the '389 patent these references do not make claim 5 obvious. Applicant also contends that it would not be obvious to combine the torch of the '389 patent with either of the '579 patent or the '767 patent, because unless a flow device were desired, but that would be teaching away from the present invention.

Accordingly, Applicant believes that this claim is not obvious in view of the references, either alone or in combination, and respectfully requests removal of this rejection and allowance of this claim.

Claim 6 has been rejected under §103(a) as being unpatentable over the '767 patent (Nakajima) or the '579 patent (Lin) in view of US Patent No. 3,765,276 to Pollitt ("the '276 patent"). The '276 patent discloses a bench top system for thermally stripping wire and having members for cutting wire, as might have been useful for metal wires in 1973 (i.e., when it was issued). However, optical fibers and metal wires are in no way related. There is no teaching

from the '276 patent regarding optical fibers. Furthermore, as a bench top system, there is no suggestion that there is any applicability to any handheld system. There is no suggestion to combine the '276 patent with either of the '767 patent or the '579 patent, nor is there any suggestion that any of them could be used for stripping optical fiber.

Accordingly, Applicant believes that this claim is not obvious in view of the references, either alone or in combination, and respectfully requests removal of this rejection and allowance of this claim.

Claims 7-8, which depend from claim 1, have been rejected under §103(a) as being unpatentable over the '767 patent (Nakajima) or the '579 patent (Lin) in view of US Patent No. 6,402,856 to Vetrano ("the '856 patent"). The '856 patent discloses a system, that includes a heat chamber and heater core for heating air to a temperature sufficient to strip an optical fiber. However, the present invention does not include such a structure, nor would it be obvious to combine the '856 patent with either of the '767 patent or the '579 patent. For the reasons stated above, neither of the '767 patent or the '579 patent anticipate the present invention, nor to they make it obvious. Further a combination of the '856 patent with either would not result in the present invention, since they are all so fundamentally structurally different. As such, there is no suggestion anywhere to even attempt to combine these references.

Accordingly, Applicant believes that claims 7 and 8 are not obvious in view of the references, either alone or in combination, and respectfully requests removal of these rejections and allowance of these claims.

For all of the foregoing reasons, entry of the amendments herein and allowance of the pending claims is respectfully requested. The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. §1.16 and §1.17 that may be required, or credit any overpayment,

to our Deposit Account No. 50-1133.

Respectfully submitted,

David M. Mello, Reg. No. 43,799
McDermott, Will & Emery, LLP
28 State Street
Boston, MA 02109
Tel (617) 535-4037
Fax (617) 535-3800
E: dmello@mwe.com

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